ABSTRACT

One or a plurality of branch paths (3) having opening end portions (2) formed in the vicinity of an inner wall surface of a main path (1) through which a fluid flows so as to point the upstream or downstream side of the main path, and causing part of the fluid running in the vicinity of the inner wall surface of the main path to flow therethrough via the opening end portions, to thereby detect flow rates of the fluids running through the branch paths by using a thermal flow sensor (4). Preferably, a plurality of opening end portions (2a) pointed toward the upstream side or a plurality of opening end portions (2b) pointed toward the downstream side are arranged at regular intervals along the path cross section of the main path around the axis of the main path, to thereby measure a fluid flow with high accuracy.